UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,068	12/07/1999	JULIO C. BERMUDEZ	4203-P	7264

7590   08/01/2003

LlOYD W. SADLER
PARSONS BEHLE & LATIMER
201 SOUTH MAIN STREET
SUITE 1800
SALT LAKE CITY, UT   84111-2218

EXAMINER
LUU, SY D

ART UNIT	PAPER NUMBER
2174	19

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- Th MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _14 May 2003_ .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _31-57_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _31-57_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6) ☐ Other: .

DETAILED ACTION

1.   This communication is responsive to the Amendment C, filed 5/14/03.

2.   Claims 31-56 are pending in this application. Claim 1 is the sole independent claim. In the Amendment C, claim 1 was amended.   This action is made Final.

3.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

4.   Claim 31 is objected to because of the following informalities: on line 11, the term "vriables" has a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claims 31-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "deformable" in claim 31 is a relative term which renders the claim indefinite. The term "deformable" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably

apprised of the scope of the invention. The usage of this term is vague and fails to show positive

assertiveness.

Claim Rejections - 35 USC § 103

7.   Claims 31-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards et

al (U.S. patent 5,121,469) in view of Isowaki et al. ("Isowaki", US 6,417,854 B1) and Schwuttke

et al ("Schwuttke", U.S. patent 6,222,547).

As per claim 31, Richards teach the following:

(A) an information environment, comprising multiple data variables and one or more data

interdependency relationships between said data variables (figure 12; col. 14, lines 4 et seq.);

(B) a framework within the environment (column 17, lines 4-5); and

(C) an object, having properties including dimensions, located about the framework,

wherein said properties of said object represent multiple said data interdependency relationships

between said multiple data variables and are correlated with data (figure 12, elements P1-P9,

column 14, lines 3-5, 28-37; and figure 15; column 20, lines 3 et seq.).

Richards does not teach said object to be deformable in multiple dimensions to show

changes in said data interdependency relationships. Isowaki teaches a multiple-dimensions

image processing system which enables "the detection of the direction of movement and amount

of movement of a movable object...and enables the reflection of the detected amount thereof in

the amount of deformation of the movable object." (col. 2, lines 59-67). It would have been

obvious to an artisan at the time of the invention to combine Isowak's teaching with Richards' in

order to further provide visible changes to the data interdependency relationships.

The system of Richards and Isowaki still does not specifically teach that the framework comprises displaying normal values to assist the user in discerning deviations from said data interdependency relationship between said multiple data variables and said normal values, nor displaying an object in relation to the normal values. However, Richards describes at column 16, lines 19-34, that the "processor may determine the average or mean of these values, and establish the minimum and maximum plot values for the associated image parameter relative to this average or mean value".

On the other hand, it is known in the art that information can be displayed relative to normal values. For instance, Schwuttke show at figures 4, 5A, 5B, and describe at column 8, lines 5-23, that "objects are displayed in the default color, white, to indicate that the parameter it represents is in its normal state" and that "objects are displayed yellow or red to indicate whether the parameter is in a warning limit alarm state". In addition, Schwuttke teaches that the graphical object, during a warning state, rises to a height above a grid which is "proportional to how far the parameter has exceeded the limit" Thus, Schwuttke makes up for the missing portions in Richards and Isowaki by teaching the display of objects relative to normal values. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the display of information in relation to normal values as in Schwuttke in the invention of Richards and Isowaki because it helps a user "recognize impending alarm conditions earlier and with greater reliability' [see column 4, lines 49-61 of Schwuttke].

Richards inherently teaches a natural dynamic system [claim 32] and an artificial dynamic system [claim 33] at figures 2, 3.

As to claim 34, Richards teaches sensor presented information, at figure 2, and column 7, lines 8-10.

Regarding claim 35, Richards teaches a measurement of interaction between one or more vital signs of the system, at figure 12.

As per claim 36, Richards describes mapping system data, with mapping means 16b, at figure 1, and column 6, lines 40-42.

As to claim 37, Richards teaches a relationship between a data object and expected data, at column 13, lines 1-9.

In addition, Richards shows objects within health [claim 38] and life [claim 39] spaces, at figure 12.

Regarding claim 40, Richards teaches data attributes, such as color and hue, at column 4, line 55 to column 5, line 5.

As to claim 41, Richards shows a 3-D shape correlation, at figure 12.

As per claim 42, Richards shows a major and minor axis for the object, including a length dimension for the minor axis, at figure 14, and column 4, lines 60-61.

In addition, Richards teaches 3-D shape changes [claim 43], attribute changes [claim 44], and axes changes [claim 45], at figure 15, and column 20, lines 3-15, which describes that the system "involves a cycle in which the system produces a display, that display is perceived by the analyst, the analyst adjusts the operation of the system, and the system in response adjusts its display to present a new display".

As per claim 46, Richards shows a time reference axis, at figure 14.

Regarding claims 47-49, Richards teaches that a user can change the viewpoint, at block 230, in figure 15, and column 20, lines 61-63.

As to claim 50, Richards teaches a zoom in and out operation, at block 234, in figure 15.

As per claim 51, Richards inherently teaches a history display, at column 20, lines 56-57.

Regarding claim 52, Richards describes display customization, with block 226, at figure 15, and column 20, lines 59-60.

Richards teaches object storage [claim 53] with memory 14, at figure 1.

In addition, Richards teaches changing the display rate [claims 54, 55] with block 232, at figure 15, and column 20, lines 63-66.

As to claim 56, Richards teaches a comparison with expected data, at column 13, lines 1-9.

Response to Arguments

8.   Applicant's arguments with respect to claim 31 have been considered but are moot in view of the new ground(s) of rejection. The Examiner agrees that the combination of Richards and Schwuttke does not disclose the claim limitations. However, the claims have been rejected in view of Richards, Isowaki and Schwuttke.

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action.   Accordingly, THIS ACTION IS MADE FINAL.   See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action.   In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

10.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Arai et al. (US 6,201,542 B1)   Gagne et al. (US 5731,819)

Inquires

11.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sy Luu whose telephone number is **(703) 305-0409**. The

examiner can normally be reached on Monday - Thursday from 7:00 am to 4:30 pm (EST). The

examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.
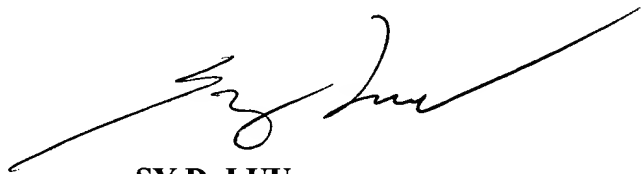
The fax number for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238 [After Final Communication]

(703) 746-7239 [Official Communication]

(703) 746-7240 [For status inquiries, Draft Communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

SY D. LUU
PRIMARY EXAMINER